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ACKNOWLEDGEMENT.—We are indebted to Mr. Carl Krebs of Cleveland for the photograph of specimen shown in Fig. 171, which represents one of the Stink-horn fungi or Phalloids. It differs from Dictyophora and Phallus (which we illustrated on pages 71 and 83) in the pileus being wholly adnate to the summit of the stipe, the gleba occupying its outer surface. The stipe is hollow within.

WHITE RUST.—This name is given to a group of parasitic fungi which are not real Rusts at all. They belong to a distinct group called the Phy-co-my-ce'-tes or Algal-fungi. We hardly need go into the botanical details which would weary a beginner—but suffice it to say that the family to which the fungus shown on page 220 belongs is that to which the Grape Mildew belongs, namely, *Per-o-nos-po-ra'-ce-ae.* We have selected this particular one, growing on the wild Potato-vine (*Ipomoea pandurata*) because it produces conspicuous distortions of the host; see *a* in Fig. 173. An interesting thing is this that the parasite produces two kinds of spores—*summer spores* and *winter spores.* The former are shown in the figure at *c* and one of the latter embedded in the tissue of the leaf, at *b.* The summer spores are white or nearly so, and a waxy white-covering is to be seen just before they break through the epidermis for dissemination. The winter spores lie dormant till spring.

FIG. 171.—MU-TI'-NUS CA-NI'-NUS.—One of the Phalloids or Stink-horn fungi. See the first paragraph above. Photograph by Carl Krebs, Cleveland, Ohio.

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"QUOTATION PAGE."

QUOTATION.—The item we give below appeared in the Journal of Mycology and pertains to an interesting observation by Prof. Sturgis on the unseasonal occurrence of the Morelle:

"REMARKABLE OCCURRENCE OF MORCHELLA ESCULENTA (L.) Pers.—During a recent hunting trip in southwestern British Columbia the writer came across this fungus growing in such abundance and in a location and at a season of the year so unusual that the circumstances seem worth recording. Usually one expects to find *Morchella* in the Spring growing on the borders of meadows or other grassy places. In the present instance the plants were found in September on a steep mountain side which had, within a little over a year, been subjected to a destructive forest fire.

"On September 11th the writer was skirting the precipitous side of a mountain at an altitude of about 7,000 feet and while passing through what had been a fairly good growth of aspens and small spruces, a few fine specimens of *Morchella* were noticed. Further search revealed the presence of these plants literally in hundreds. A fire had passed across the mountain in June 1904, leaving only the skeletons of the trees standing and charring the ground to such a depth that no trace of green vegetation has since appeared. Under these unfavorable circumstances and at a season when snow had already fallen not far from the locality a bushel of *Morchellas* might have been gathered within a radius of one hundred yards. The specimens were exceptionally fine, in some cases attaining a height of seven inches and a circumference around the pileus of ten inches. In such specimens the pileus usually showed a great variety of form, from conical and flattened to nearly spherical. In other cases the pileus more nearly resembled that of *M. conica* Pers. The base of the stipe was in all cases much swollen and consisted of a mass of mycelium and soil cemented into a sclerotoid mass. Specimens were secured from which the identity of the fungus was later determined.

"The interesting question arises whether, on the western slopes of the Rocky Mountains, *Morchella* usually occurs in the Autumn rather than in the Spring as elsewhere, and also how the presence of the particular specimens is to be accounted for. It is hardly possible that the spores could have been carried to the locality in sufficient quantity to have produced in one season so large a growth of plants, and it is almost equally inconceivable that a subterranean mycelium could have resisted a degree of heat sufficient to destroy permanently all surface vegetation and leave the ground a desolate waste of charred clay." [W. C. Sturgis, Journal of Mycology.]

QUOTATION.—An extremely interesting letter was received during the summer from Mr. Pierson L. Halsey, secretary of the Wisconsin Mycological Society, Milwaukee. We reproduce such parts as make plain the matter referred to:

"I enclose with this mail a small package and specimens of a common mushroom in gardens. * * * *

"On Saturday, July 8, 1905, the family of J—— E——, of our city, was reported in the press as seriously poisoned by eating toadstools from their garden. I forthwith investigated yesterday morning, getting the remairs of specimens, the cut-off stems, one of the enclosed, and whatever were left, which was very few. Also the reports of the two attending physicians in full. There is no possible doubt as to this being the only mushroom eaten.

"They were cut, something over a pound, from the kitchen garden beneath potato vines, rich, sandy loam, highly fertilized, and immediately fried gills up with butter, salt and pepper, in a large dripping pan, full. Mr. E—— ate very heartily (he says he ate a pound, which is questionable). Mrs. E——and two little girls, aged 10 and 8, ate only a few, the girls not over ten caps each. About ten minutes after their meal Mr. E—— came in feeling very dizzy and found his wife resting on the table complaining of being queer; in about ten minutes the girls complained of dizziness and tired feeling in the limbs and arms. Mrs. E——'s arms and hands were trembling and she had 'no strength' and she couldn't 'see

plain;' they called the doctor by phone, Dr. C. H. Lewis and Dr. Hankwitz both coming within five minutes of each other and within forty minutes after their meal., i. e., at about 7:45. Mrs. E—— had meanwhile given a teaspoonful of raw mustard to Mr. E.——and less amount to the children and self. All drank much fresh milk.

"Dr. Lewis arriving, found Mr. E—— prostrated, too dizzy to walk; he had vomited some, as had the little girl. All were dizzy, trembling, and Mr. E—— frightened. Both Mr. and Mrs. E——perspired profusely; pulse not much above normal. No griping or pain; only weakness and vertigo, except that the mustard and excessive draughts of milk distressed somewhat.

"Treatment—Teaspoonful of fluid extract ipecac (and one-half to girls) in warm water, followed in Mr. E——'s case with hypodermic 1-150 gr. atropin with strychnia. The dizziness continued all the day and following night, but all felt well yesterday morning except for headaches, and are well to-day As the caps were small, and placed close in the dripping pan, there may possibly have been 75 or thereabouts, his hat full Their breakfast at about 7 o'clock consisted of coffee, bread and butter, these fried mushrooms and strawberries (with sugar), freshly picked from their garden. No paris green or other insecticide had been used in the garden. * * * " [Pierson W. Halsey, letter, July 10, 1905.]

[The specimens, or part of them at least, were Amanita verna.—Ed.]

FIG. 172.—LAC-TA'-RI-US VO-LE'-MUS.—A species with abundant milky juice though "distinguished for its edible qualities." This specimen of deep lavendar color, was sent from Chillicothe by Supt. M. E. Hard.

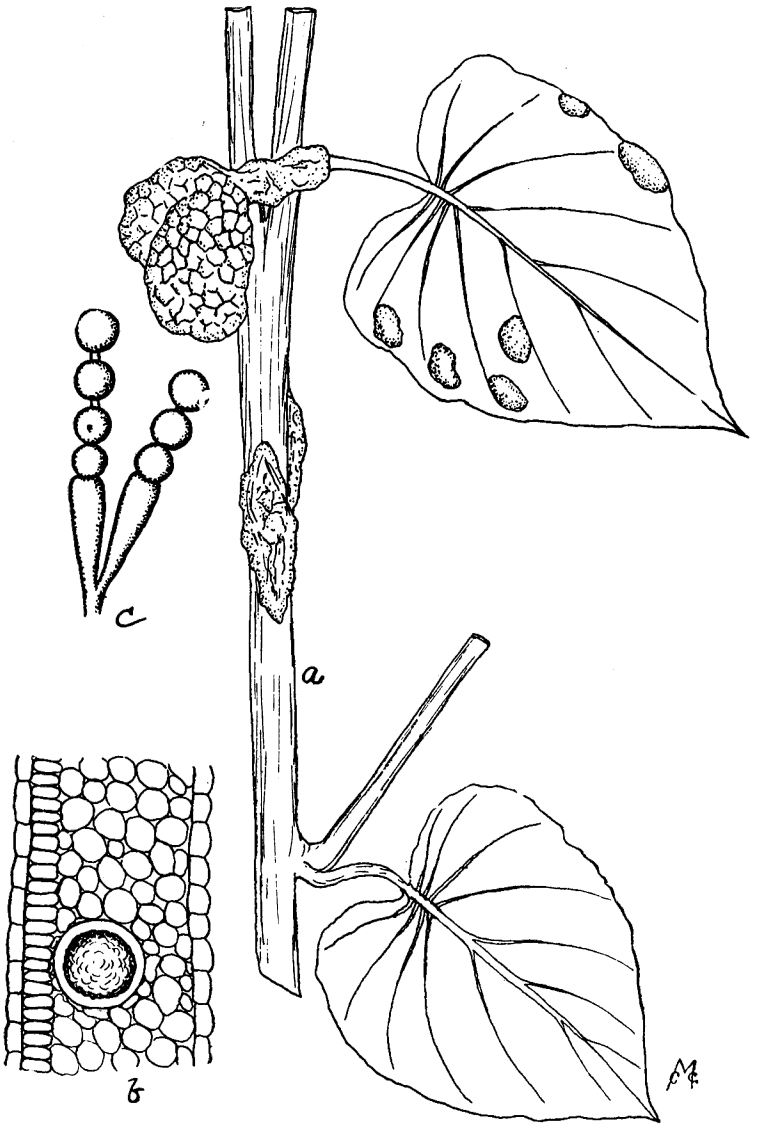

FIG. 173.—AL-BU'-GO IP-O-MOE'-AE-PAN-DU-RA'-TAE.—A "White Rust" causing distortions of the Wild Potato-vine. The summer and winter spores are shown at *c* and *b* respectively.

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